

Provide Aerospace Products and Capabilities

Goals

This process is the means by which NASA's Strategic Enterprises and their Centers deliver systems (ground, aeronautics, space), technologies, data, and operational services to NASA customers. Through the use of Agency facilities, customers can conduct research, explore and develop space, and improve life on Earth. This process is used to answer the Agency fundamental question: "What cutting-edge technologies, processes, techniques, and engineering capabilities must we develop to implement our research agenda in the most productive, economical, and timely manner?" The goal of the process is to enable NASA's Strategic Enterprises and their Centers to deliver products and services to customers more effectively and efficiently. The process is also used to enable the Communicate Knowledge process to extend the technology, research, and science benefits from NASA programs broadly to the public and commercial sectors.

Performance Measures

Goal: Enable NASA's Strategic Enterprises and their Centers to deliver products and services more effectively and efficiently while extending the technology, research, and science benefits broadly to the public and commercial sectors

Objective - Meet schedule and cost commitments

NASA's role in the advancement of research and technology is conducted through the construction and operation of facilities such as telescopes, satellites, and ground-based laboratories and test facilities.

The performance target will be to:

- Keep the development and upgrade of major scientific facilities and capital assets within budget. On average, the Agency will not exceed 110 percent of cost and schedule estimates. Target 1P1

Objective - Improve and maintain NASA's engineering capability

The performance targets will be to:

- Ensure the availability of NASA's spacecraft and facilities by decreasing operating time lost to unscheduled downtime, relative to FY00 availability. Target 1P3
- Establish prototype collaborative engineering environments focused on the representative set of enterprise applications and evaluate performance against non-collaborative benchmarks. Target 1P2

Objective - Capture and Preserve Engineering and Technological Process Knowledge to Continuously Improve NASA's P/P Management

The performance target will be to

- Capture a set of best practices/lessons learned from each Program, to include at least one from each of the four PAPAC subprocesses documented in NPG 7120.5, commensurate with current program status. These data will be implemented in PAPAC process improvement and in Program/Project Management training. Target 1P4

Objective - Facilitate the insertion of technology into all programs and proactively transfer technology, form commercialization partnerships, and integrate all innovative approaches to strengthen U.S. competitiveness

The performance targets will be to:

- Dedicate the percent of the technology budget that was reported in the FY00 Performance Report toward leveraging with activities of other organizations. Target 1P6
- Dedicate 10 to 20 percent of the Agency's Research & Development budget to commercial partnerships. Target 1P5

PAPAC FY01 Performance Plan

Strategic Plan Goal	Strategic Plan Objective	01 #	FY01 Targets	FY01 Indicators
Enable NASA's Strategic Enterprises and their Centers to deliver products and services more effectively and efficiently while extending the technology, research, and science benefits broadly to the public and commercial sectors	Reduce the cost and development time to deliver products and operational services	1P1	Meet schedule and cost commitments by keeping development and upgrade of major scientific facilities and capital assets within 110% of cost and schedule estimates, on average.	Development schedule and cost data are drawn from NASA budget documentation for major programs and projects to calculate the average performance measures.
Enable NASA's Strategic Enterprises and their Centers to deliver products and services more effectively and efficiently while extending the technology, research, and science benefits broadly to the public and commercial sectors	Improve and maintain NASA's engineering capability	1P2	Establish prototype collaborative engineering environments focused on the representative set of enterprise applications and evaluate performance against non-collaborative benchmarks.	Evaluation of the readiness of the prototype and benchmarking of its performance will be completed.
Enable NASA's Strategic Enterprises and their Centers to deliver products and services more effectively and efficiently while extending the technology, research, and science benefits broadly to the public and commercial sectors	Improve and maintain NASA's engineering capability	1P3	Ensure the availability of NASA's spacecraft and ground facilities by decreasing the operating time lost to unscheduled downtime.	Each field center is reporting the operational downtime of the facilities identified for inclusion in the measure.
Enable NASA's Strategic Enterprises and their Centers to deliver products and services more effectively and efficiently while extending the technology, research, and science benefits broadly to the public and commercial sectors	Capture and preserve engineering and technological best practices and process knowledge to continuously improve NASA's program/project management	1P4	Capture a set of best practices/lessons learned from each Program, to include at least one from each of the four PAPAC subprocesses documented in NPG 7120.5, commensurate with current program status. Data will be implemented in PAPAC process improvement and in Program/Project Management training.	The effectiveness of the PAPAC processes are to be evaluated via the formal collection and utilization of inputs from projects and programs.
Enable NASA's Strategic Enterprises and their Centers to deliver products and services more effectively and efficiently while extending the technology, research, and science benefits broadly to the public and commercial sectors	Facilitate the insertion of technology into all programs and proactively transfer technology, form commercialization partnerships, and integrate all innovative approaches to strengthen U.S. competitiveness	1P5	Dedicate 10 to 20 percent of the Agency's Research & Development budget to commercial partnerships.	Each of the Enterprises are reporting the value of their contribution to commercial partnerships.
Enable NASA's Strategic Enterprises and their Centers to deliver products and services more effectively and efficiently while extending the technology, research, and science benefits broadly to the public and commercial sectors	Facilitate the insertion of technology into all programs and proactively transfer technology, form commercialization partnerships, and integrate all innovative approaches to strengthen U.S. competitiveness	1P6	Dedicate the percentage of the technology budget that was reported in the FY00 Performance Report toward leveraging with activities of other organizations.	Each of the Enterprises reports technology development activities leveraged through formal agreements.

PAPAC FY01	Budget Category	HEDS	Aero-Space Technology	Space Science	Earth Science
Performance Target					
Meet schedule and cost commitments by keeping development and upgrade of major scientific facilities and capital assets within 110% of cost and schedule estimates, on average. (1P1)		X	X	X	X
Establish prototype collaborative engineering environments focused on the representative set of enterprise applications and evaluate performance against non-collaborative benchmarks. (1P2)			X		
Ensure the availability of NASA's spacecraft and ground facilities by decreasing the operating time lost to unscheduled downtime. (1P3)		X	X	X	X
Capture a set of best practices/lessons learned from each Program, to include at least one from each of the four PAPAC subprocesses documented in NPG 7120.5, commensurate with current program status. Data will be implemented in PAPAC process improvement and in Program/Project Management training. (1P4)		X	X	X	X
Dedicate 10 to 20 percent of the Agency's Research & Development budget to commercial partnerships. (1P5)		X	X	X	X
Dedicate the percentage of the technology budget that was reported in in the FY00 Performance Report toward leveraging with activities of other organizations. (1P6)		X	X	X	X